



UNITED STATES PATENT AND TRADEMARK OFFICE

UNITED STATES DEPARTMENT OF COMMERCE
United States Patent and Trademark Office
Address: COMMISSIONER FOR PATENTS
P.O. Box 1450
Alexandria, Virginia 22313-1450
www.uspto.gov

APPLICATION NO.	FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.	CONFIRMATION NO.
09/699,805	10/30/2000	William Thornton	98006/17UTL	8722
23873	7590	07/20/2006	EXAMINER	
ROBERT W STROZIER, P.L.L.C			STOICA, MARIA	
PO BOX 429			ART UNIT	
BELLAIRE, TX 77402-0429			PAPER NUMBER	
			3715	
DATE MAILED: 07/20/2006				

Please find below and/or attached an Office communication concerning this application or proceeding.

Office Action Summary

Application No.

09/699,805

Applicant(s)

THORNTON, WILLIAM

Examiner

Maria Stoica

Art Unit

3715

-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --

Period for Reply

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 3 MONTH(S) OR THIRTY (30) DAYS, WHICHEVER IS LONGER, FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133). Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

Status

- 1) ☒ Responsive to communication(s) filed on 12 April 2006.
- 2a) ☒ This action is **FINAL**. 2b) ☐ This action is non-final.
- 3) ☐ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

Disposition of Claims

- 4) ☒ Claim(s) 1,2,8-10,14-16 and 25-27 is/are pending in the application.
- 4a) Of the above claim(s) 3-7 is/are withdrawn from consideration.
- 5) ☐ Claim(s) _____ is/are allowed.
- 6) ☒ Claim(s) 1,2,8-10,14-16 and 25-27 is/are rejected.
- 7) ☐ Claim(s) _____ is/are objected to.
- 8) ☐ Claim(s) _____ are subject to restriction and/or election requirement.

Application Papers

- 9) ☐ The specification is objected to by the Examiner.
- 10) ☐ The drawing(s) filed on _____ is/are: a) ☐ accepted or b) ☐ objected to by the Examiner.
Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).
Replacement drawing sheet(s) including the correction is required if the drawing(s) is objected to. See 37 CFR 1.121(d).
- 11) ☐ The oath or declaration is objected to by the Examiner. Note the attached Office Action or form PTO-152.

Priority under 35 U.S.C. § 119

- 12) ☐ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).
- a) ☐ All b) ☐ Some * c) ☐ None of:
1. ☐ Certified copies of the priority documents have been received.
 2. ☐ Certified copies of the priority documents have been received in Application No. _____.
 3. ☐ Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).

* See the attached detailed Office action for a list of the certified copies not received.

Attachment(s)

- | | |
|--|---|
| 1) <input type="checkbox"/> Notice of References Cited (PTO-892) | 4) <input type="checkbox"/> Interview Summary (PTO-413)
Paper No(s)/Mail Date. _____ |
| 2) <input type="checkbox"/> Notice of Draftsperson's Patent Drawing Review (PTO-948) | 5) <input type="checkbox"/> Notice of Informal Patent Application (PTO-152) |
| 3) <input type="checkbox"/> Information Disclosure Statement(s) (PTO-1449 or PTO/SB/08)
Paper No(s)/Mail Date _____ | 6) <input type="checkbox"/> Other: _____ |

DETAILED ACTION

Status of Claims

1. Amended claims 1-2 and 15 have been entered and claims 11-13 and 17-24 have been cancelled. Claims 3-7 are withdrawn. Claims 1, 2, 8-10, 14-16, and 25-27 are pending. It is noted that claims 8, 10, and 16 have been mislabeled "currently presented." This label should be changed to "previously presented."

Claim Rejections - 35 USC § 102

The following is a quotation of the appropriate paragraphs of 35 U.S.C. 102 that form the basis for the rejections under this section made in this Office action:

A person shall be entitled to a patent unless –

(b) the invention was patented or described in a printed publication in this or a foreign country or in public use or on sale in this country, more than one year prior to the date of application for patent in the United States.

2. Claims 1, 8-10, and 14 are rejected under 35 U.S.C. 102(b) as being anticipated by Abrahamson et al. (US Patent No. 3,520,071). Abrahamson discloses an apparatus for simulating a pulse and correlated heart beat of an animal, the apparatus comprising a playback device for generating a first electronic signal corresponding to a pulse (col. 3, line 73) and a second electronic signal corresponding to a correlated heart beat (col. 3, line 73), a tactile pulse simulator for receiving the pulse signal and generating a pressure pulses simulating an arterial pulse discernible by touch (col. 8, lines 39-44, lines 48-52) and an audio simulator for receiving the correlated heart beat signal (col. 9,

lines 40-45) and recreating the heart beat to be heard through a stethoscope (col. 4, lines 8-9).

Regarding claim 8, Abrahamson discloses that the tactile pulse simulator comprises a collapsible tube apparatus (col. 8, lines 39-47).

Regarding claim 9, Abrahamson discloses that the tactile pulse simulator and the audio simulator are housed within a housing (col. 6, lines 10-11; col. 9, lines 72-74).

Regarding claim 10, Abrahamson discloses that the tactile pulse simulator comprises a resilient cover covering a tactile switch capable of generating pulses simulating the arterial pulse (col. 9, lines 57-72).

Regarding claim 14, Abrahamson discloses that the tactile pulse simulator is within a first housing (193) and the audio simulator is within a second housing (190) (Figure 12).

Claim Rejections - 35 USC § 103

The following is a quotation of 35 U.S.C. 103(a) which forms the basis for all obviousness rejections set forth in this Office action:

(a) A patent may not be obtained though the invention is not identically disclosed or described as set forth in section 102 of this title, if the differences between the subject matter sought to be patented and the prior art are such that the subject matter as a whole would have been obvious at the time the invention was made to a person having ordinary skill in the art to which said subject matter pertains. Patentability shall not be negated by the manner in which the invention was made.

3. Claims 2 and 16 are rejected under 35 U.S.C. 103(a) as being unpatentable over Abrahamson in view of Takashina et al. (US Patent No. 6,461,165). Abrahamson discloses an apparatus for simulating a right side pulse and correlated heart beat of an animal, the apparatus comprising a playback device for generating a first electronic

signal corresponding to the right side pulse and a second electronic signal corresponding to a correlated heart beat (col. 3, line 73; col. 9, lines 57-72), a tactile pulse simulator for receiving the right pulse signal and generating a pressure pulses simulating a right side arterial pulse discernible by touch (col. 8, lines 39-44, lines 48-52), and an audio simulator for receiving the correlated heartbeat signal (col. 9, lines 40-45) and recreating the heartbeat to be heard through a stethoscope (col. 4, lines 8-9).

Abrahamson does not disclose the simulation of a left side pulse along with an electronic signal corresponding to the left side pulse and a tactile pulse simulator for receiving the left pulse signal and generating a pressure pulses simulating a left side arterial pulse discernible by touch. However, Takashina teaches the placement of electric pulse generators (col. 1, lines 63-67) on both sides of the body, more specifically both arms (Figure 2, items 5, 6, 7, and 8). It would have been obvious to one of ordinary skill in the art at the time of invention to place the structure described by Abrahamson on both sides of a manikin as taught by Takashina to create a complete simulation, as opposed to a half-body simulation, of the human heart beat and pulse.

Regarding claim 16, Abrahamson discloses that the tactile pulse simulator comprises a collapsible tube apparatus (col. 8, lines 39-47).

4. Claims 15 is rejected under 35 U.S.C. 103(a) as being unpatentable over Abrahamson in view of Takashina, further in view of Elwell (US Patent No. 3,298,132). Abrahamson discloses that the tactile pulse simulator comprises a resilient cover covering a tactile switch capable of generating pulses simulating the arterial pulse (col.

9, lines 57-72). Abrahamson does not expressly disclose that the first housing simulates a human wrist or that the tactile pulse simulator is located at a position in the wrist corresponding to a position in the patient where the arterial pulse is detected and monitored. However, Takashina teaches that the pulse generators can be located at the brachial artery or radial artery positions (col. 4, lines 63-67). It would have been obvious to one of ordinary skill in the art at the time of invention to place the pulse generator at the wrist in order to simulate the pulse at a position on the human body where it is commonly known that the pulse is easy to detect.

5. Claims 25-27 are rejected under 35 U.S.C. 103(a) as being unpatentable over Abrahamson in view of Takashina. Abrahamson discloses an apparatus for simulating a pulse and correlated heart beat of a human, the apparatus comprising a playback device for generating an electronic signal corresponding to the right side pulse and a second electronic signal corresponding to a correlated heart beat (col. 3, line 73; col. 9, lines 57-72); a first housing including a first tactile pulse simulator for receiving the right side arterial pulse signal and generating a pressure pulses corresponding to a right arm arterial pulse discernible by touch (col. 8, lines 39-44, lines 48-52); and a second housing including an audio simulator for receiving the heart beat signal and generating an audible recreation of the correlated heartbeat (col. 9, lines 40-45) and designed to be heard through a stethoscope position on a surface of the housing (col. 4, lines 8-9).

Abrahamson does not disclose a second electronic signal corresponding to the left side pulse and an additional housing including a second tactile pulse simulator for

receiving the left side arterial pulse signal and generating a pressure pulses corresponding to a left arm arterial pulse discernible by touch. However, Takashina teaches the placement of electric pulse generators (col. 1, lines 63-67) on both sides of the body, more specifically both arms (Figure 2, items 5, 6, 7, and 8). It would have been obvious to one of ordinary skill in the art at the time of invention to place the structure described by Abrahamson on both sides of a manikin as taught by Takashina to create a complete simulation, as opposed to a half-body simulation, of the human heart beat and pulse.

Regarding claim 26, Abrahamson, as modified by Takashina, discloses that the tactile pulse simulator comprises a collapsible tube apparatus (col. 8, lines 39-47).

Regarding claim 27, Abrahamson, as modified by Takashina and Elwell, discloses that the tactile pulse simulators comprise a resilient cover covering the tactile switch capable of generating pulses simulating the arterial pulse (col. 3, lines 62-67; col. 9, lines 57-72).

Response to Arguments

6. The amended drawings have been entered. The objections to the drawings have been withdrawn.
7. The amendments to the specification have been entered. The objection to the specification has been withdrawn.
8. The 35 USC 101 rejection of claim 15 has been withdrawn in response to the amendment submitted by the applicant.

9. Applicant's arguments have been fully considered but they are not persuasive.

The applicant argues that Abrahamson does not disclose tactile devices for feeling pulses with one's fingers. This argument is not persuasive. Abrahamson clearly states that the manikin (100) produces life-like responses (col. 3, lines 1-2). Among these life-like responses, Abrahamson presents a long list of responses that are motion responses (col. 3, lines 3-16). Furthermore, Abrahamson discloses that the manikin has a heart beat, carotid and temporal pulse beats, and blood pressure in the same paragraph in which he describes the manikin's physiological characteristics (col. 3, lines 68-74) which are controlled by electro-pneumatic transducers (col. 4, lines 1-2). Lastly, Abrahamson discloses that "a supply of fluid under pressure can be fed to lines controlling **movement** in different portions of the manikin. The actuation of the articulations of manikin 100 ... are as follows: ... (J) Carotid and temporal pulsing is presented by means of flattened, sealed vinyl tubes" (col. 6, lines 19-23 and col. 8, lines 39+). It is obvious that these signals passed to the pneumatic sensors would produce a physical pulse (i.e., movement) in the manikin, which could inherently be felt by a user. For further support of this, it is also pointed out that Abrahamson clearly states: "In addition to the motion actuation of the manikin 100, other electrical signals produce types of actuation of the manikin not connected with motion" (col. 8, line 53). Abrahamson then goes on to describe that these "other" electrical signals include sound (e.g., of the heart beat) in the paragraph starting at col. 8, line 73. Since the arms are composed of foam covered in vinyl skin, this cover is soft and therefore, pressure created underneath can be detected by a user's finger.

With regard to the applicant's arguments that neither Takashina nor Elwell teach tactile pulse devices, it is noted that these references are not used for the teaching of this feature. Furthermore, since it has been shown that Takashin does indeed disclose this feature, this argument is moot.

Conclusion

10. **THIS ACTION IS MADE FINAL.** Applicant is reminded of the extension of time policy as set forth in 37 CFR 1.136(a).

A shortened statutory period for reply to this final action is set to expire THREE MONTHS from the mailing date of this action. In the event a first reply is filed within TWO MONTHS of the mailing date of this final action and the advisory action is not mailed until after the end of the THREE-MONTH shortened statutory period, then the shortened statutory period will expire on the date the advisory action is mailed, and any extension fee pursuant to 37 CFR 1.136(a) will be calculated from the mailing date of the advisory action. In no event, however, will the statutory period for reply expire later than SIX MONTHS from the mailing date of this final action.

11. Any inquiry concerning this communication or earlier communications from the examiner should be directed to Maria Stoica whose telephone number is (571) 272-5564. The examiner can normally be reached on M-F: 8:00am - 4:30pm.


If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, Robert Olszewski can be reached on (571) 272-6788. The fax phone

Art Unit: 3715

number for the organization where this application or proceeding is assigned is 571-273-8300.

Information regarding the status of an application may be obtained from the Patent Application Information Retrieval (PAIR) system. Status information for published applications may be obtained from either Private PAIR or Public PAIR. Status information for unpublished applications is available through Private PAIR only. For more information about the PAIR system, see <http://pair-direct.uspto.gov>. Should you have questions on access to the Private PAIR system, contact the Electronic Business Center (EBC) at 866-217-9197 (toll-free). If you would like assistance from a USPTO Customer Service Representative or access to the automated information system, call 800-786-9199 (IN USA OR CANADA) or 571-272-1000.

MS


KATHLEEN MOSSER
PRIMARY EXAMINER